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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/575,188	05/23/2000	Kia Silverbrook	NPT004US	9208

24011 7590 06/19/2002

SILVERBROOK RESEARCH PTY LTD  
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AUSTRALIA

EXAMINER

LEE, SEUNG H

ART UNIT PAPER NUMBER

2876

DATE MAILED: 06/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/575,188

Applicant(s)

SILVERBROOK ET AL.

Examiner

Seung H Lee

Art Unit

2876

-- **Th MAILING DATE of this communication appears on the cov r sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-178 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-178 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Objections***

2. Claims 177 and 178 are objected to because of the following informalities:

Re claims 177 and 178: the phrase "55 to 64 or 67" in claim 177 and the phrase "93 or 96 to 99" is vague and unclear to the examiner. The examiner interprets the scope of the claims as follows "55 to 64, or 67" for claim 177 and "93, or 96 to 99" for claim 178".

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 75, 164, 168, 169, 177 and 178 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claims 75 and 164: please clarify what " $1.5 \times 10^{14}$ " means?

Re claims 168 and 169: claims are incomplete,

Appropriate clarification and correction is required.

5. Claims 40, 61, 62, and 108 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 40, line 2: The phrase "the second identity data" lacks proper antecedent basis,

Re claim 61, line 1: The phrase "the first identity data" lacks proper antecedent basis,

Re claim 62, line 1: The phrase "the second identity data" lacks proper antecedent basis,

Re claim 108, line 1: The phrase "the computer system" lacks proper antecedent basis.

Appropriate clarification and correction is required.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or  
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

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7. Claims 1-6, 25, 30 -38, 40-43, 45-51, 61-67, 70-74, 81, 82, 88-93, 107, 114, 115, 119-127, 129-132, 134-140, 143-155, 158-163, 170, 171, and 177-178 are rejected under 35 U.S.C. 102(e) as being anticipated by Dymetman et al (US 6,330,976)(hereinafter referred to as 'Dymetman').

A method of enabling user interaction with computer software running in a computer system using an interface surface (102) containing information such as a page identifier (pid) and a location identifier (loc) which are serves as an interactive elements, relating to the computer software and including coded data indicative of one interactive element such as a hyperlink to open web site a sensing device or detection device (502) senses indicating data indicative of on interactive element and generates movement data based on the page identifier and the location identifier indicative of the sensing device's movement onto interface surface, receiving the indicating data (pid) and the movement data (loc) from the sensing device, identifying the interactive element to identify an action (e.g. opening a web site) in which serves as effecting an operation of the computer software by sending data such as URL information to computer software, operating the computer software in reliance on the movement data, and in accordance with instructions associated with one interactive element, retaining or containing retrievable records (pid and loc) of each interface surface which is usable to retrieve identity contained in its associated coded data (see Fig. 12; col. 9, line 56- col. 10, line 8), a tag (206) is orientation maker, the surface is defined by laminar substrate, and the tag is located predetermined position of each cell (202), and the tags are disposed within a tessellated pattern and interlock with each other cell to cover the

surface with same rectangular shape, a first set of markings or identity data (208) and a second set of markings or identity data (210) are featured on all the cell in format of redundancy of information represented symmetrically and take form of a dot having a two possible value, tags are printed using a ink printer to print using infrared spectrum or other means to print visibly or invisibly to human eyes containing information regarding particular a digital page or other detailed data relating to information printed on the page (see Figs. 3, 5A, 5B; col. 12, lines 30-56; col. 13, lines 1-57).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 7-21, 76-80, 84-87, 94-106, 108-109, 165-167, and 173-176 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman in view of Wolff et al (GB 2,306,669, cited by applicant)(hereinafter referred to as "Wolff").

The teachings of Dymetman have been discussed above.

In addition to the teachings of Dymetman as discussed above, he also teaches that encoding of information into single zone and/or encoding marked information onto substrate within limited area of the interface surface (see Figs. 5-7; col. 13, line 1- col. 14, line 54).

However, he fails to teach or fairly suggest that the interactive elements are checkbox, a text field, a signature, and drawing.

Wolff teaches the sensing device (91) to acknowledge content of the check box, the text fields, the signature, and drawing, then sending acknowledged information to the computer system (94, 96) (see Figs. 1-6; page, 6, line 2-page 8, line 5; page 16, line 21- page 19, line 2), a position sensor (210) including a gyroscope, and an accelerometers to measure position and acceleration based on orthogonal component (e.g., x, y, and z axes), and ball-point (116) to draw the user input (see Figs. 6-11; page 17, line 5- page 23, line 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Wolff to the teachings of Dymetman in order to provide a user-friendly system means the sensing device is recognizing or acknowledging additional elements on the paper such as the check boxes, text fields, signatures, and drawings for reading-in of information automatically for computer software. Moreover, such modification would improve the authentication and/or verification of the documents scanned using verifying/authenticating signature using the spatial location and/or pressure of the signature. Furthermore, it would have been an obvious to one of ordinary skill in the art at the time the invention was made to incorporate the well-known x, y, and z axes of coordination system to measure the acceleration and position as taught by Wolff to the teachings of Dymetman in order to increase the precise measurement of the acceleration and location of the sensing device of Dymetman, and therefore an obvious expedient.

Although, Dymetman as modified by Wolff fairly suggest that the 10 millimeter sub-region includes information to identify the region, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify limited area of the interface of substrate to encode information onto substrate as taught by Dymetman to identify the region, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), failing to provide any unexpected results.

10. Claims 27, 52-60, 68, 110, 111, 113, 141, 142, 156, and 157 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman in view of Dougherty et al (US 6,076,734, cited by applicant)(hereinafter referred to as 'Dougherty').

The teachings of Dymetman have been discussed above.

Although, Dymetman teaches the method and system to enable interaction with interface surface containing identification data thereon, he fails to teach or fairly suggest that the sensing device contains identification means.

However, Dougherty teaches the sensor (12) contains the identification code to identify and monitor the sensor and each and every user, encoding or disposing the information in arcuate bands around a central region using color printer capable of producing color images with CMYK type (see Figs. 7-8; col. 10, line 33- col. 13, line 27)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Dougherty to the teachings of Dymetman in order to provide an improve an security means by monitoring and/or tracking of the each and every sensing device based on the identification number stored



in the sensing device with or without user's identification. Moreover, such modification would have been an obvious to one of ordinary skill in the art at the time the invention was made to incorporate the well-known CMYK type of color printing as taught by Dougherty to the teachings of Dymetman in order print the image on a substrate in color, and therefore an obvious expedient.

11. Claims 39, 44, 69,83, 128, 133, and 172 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman in view of Sekendur (US 5,477,012, cited by applicant).

The teachings of Dymetman have been discussed above.

Although, Dymetman teaches the method and system to enable interaction with interface surface containing identification data thereon, he fails to teach or fairly suggest that the tags are disposed stochastically and the common feature is ring shape.

However, Sekendur teaches the ring shaped dot (2) is disposed onto the surface (1) stochastically (see Figs. 1, and 2; col. col. 4, lines 28-41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Sekendur to the teachings of Dymetman in order to provide an improved and an enhanced means each dot is divided into three concentric circles partitioned into quadrants, center circle, outer circle, and rings to store/present coordination information of the coded surface, and therefore an obvious expedient.

12. Claims 29 and 118 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman in view of Mayer et al (US 4,932,679)(hereinafter referred to as 'Mayer').

The teachings of Dymetman have been discussed above.

Although, Dymetman teaches the method and system to enable interaction with interface surface containing identification data thereon and printing of interface, he fails to teach or fairly suggest that the interface is printed on multiple pages and binding of the pages.

However, Mayer teaches the printing of multiple pages and binding of the pages (see Figs. 1-4; col. 1, line 59- col. 2, line 61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Mayer to the teachings of Dymetman in order to provide an improved means by printing and binding the multiple page for oversized document and/or image, and therefore an obvious expedient.

13. Claims 22, 23, 24, 28, 112, and 116 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman in view of Cass (US 5,692,073, cited by applicant),

The teachings of Dymetman have been discussed above.

Although, Dymetman teaches the method and system to enable interaction with interface surface containing identification data thereon and printing of interface, he fails to teach or fairly suggest that the printing the interface surface on demand without using display

However, Cass teaches that printing the content on the interface surface (e.g., the web site) from received the information regarding particular web site in which users submitted or faxed to host computer with indicating appropriate hyperlink to retrieve information from the indicated web site using fax machine in which does not equip with display device (see col. 16, lines 42-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Cass to the teachings of Dymetman in order to send and receive the information from the website without using monitor. Moreover, such modification would provide accessibility of the website from the remote location wherein the Internet connection is inaccessible using popular telephone lines to retrieve information using the fax machine as taught by Cass, and therefore an obvious expedient.

14. Claims 26, and 117 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman in view of Tseng et al (US 6,308,207)(hereinafter referred to as 'Tseng').

The teachings of Dymetman have been discussed above.

Although, Dymetman teaches the method and system to enable interaction with interface surface containing identification data thereon and printing of interface, he fails to teach or fairly suggest that the distributing the interfaces using a mixture of multicast and PointCast communications protocols.

However, Tseng teaches that the multicast or PointCast communication protocol is used to send message over the networks (see col. 5, line 35- col. 6, line 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the well-known multicast and/or PointCast communication protocol as taught by Tseng to the sensing device of Dymetman in order to send and receive the scanned/read-in information between the sensing device and host system, and therefore an obvious expedient.

#### ***Additional Remarks***

The lack of an art rejection with this Office action is not an indication of allowable subject matter (i.e., even though the claims 75, 164, 168 and 169 are rewritten or amended to overcome the rejection under 35 U.S.C. 112 as discussed above). The disclosure/claimed language is such that it is impractical to conduct a reasonable search of the prior art by the Examiner.

#### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure;

Wellner [US 5,640,193], Longacre, Jr. [US 5,231,293], Poland [US 4,825,058], Reber et al [US 5,940,595], Hudetz et al [US 5,978,773], Shachar [US 6,012,102], Parry [US 6,148,331], Russell et al [US 6,386,453] disclose an accessing the information of electronic media using sensing devices,

Jones et al [US 4,906,843], and Goldman et al [US 6,036,094] disclose an optical reader.


Any inquiry concerning this communication or earlier communication from the examiner should be directed to Seung H. Lee whose telephone number is (703) 308-5894. The examiner can normally be reached on Monday to Friday from 7:30 AM to 4:00 PM.


If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (703) 305-3503. The fax-phone number for this group is (703) 308-5841 or (703) 308-7722.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [michael.lee@uspto.gov].

*All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.*

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

  
Seung H. Lee  
Art Unit 2876  
June 10, 2002

  
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